

collected in south central Mexico, at Moran, Mexico, by Hartweg and at Real del Monte, Hidalgo, by Ehrenberg.

P. A. RYDBERG

Pellett's American Honey Plants.*

Coming at a time when the earth's entire population is experiencing considerable anxiety over the sugar famine and our attention is naturally directed to logical substitutes for sweets and their source, this book on American Honey Plants has a peculiar and timely interest.

The 800,000 beekeepers of the United States are fortunate in having as one of their number a man possessing the combination of a thorough knowledge of apiculture and of nectar-producing and pollen-producing plants. This happy combination has made possible a convenient and exhaustive reference book. The approximately 900 plants in many genera, described as of some value because of nectar or pollen production are arranged alphabetically by common names with numerous cross references, Latin names accompanying the vernacular.

FRANK STOLL

PROCEEDINGS OF THE CLUB

MARCH 9, 1920

The first meeting of the Club for March was held at the American Museum of Natural History.

President Richards presided. There were 18 persons present. No business was transacted.

Dr. W. A. Setchell of the University of California gave an illustrated paper on "Aboriginal Tobaccos."

The various species of *Nicotiana* used by the tribes of American Indians were discussed. Different methods of smoking were and still are in use, but in all cases the leaves of the plant is the portion used. Evidence suggests the use of as many as fourteen

* Pellett, Frank C., American Honey Plants, together with those which are of special value to the beekeeper as sources of pollen. Pp. 1-297 + figs. 1-155. Published by American Bee Journal, Hamilton, Ill., 1920.

species, tobacco-culture having extended from Washington and southern Canada to Chile. At present 8 species appear to be used by Indians:

1. *Nicotiana Tabacum*. This, the one species now commercially cultivated, was originally grown throughout eastern South America and northward to Mexico. It has formed a large number of varieties.

2. *Nicotiana rustica*. This species was cultivated extensively throughout North America east of the Great Plains and western highlands. It was early carried to the Old World, and is still cultivated there in the Levant and Persia. The species, like some others of the genus, is unknown wild, but must be of American origin.

3. *Nicotiana Bigelovii*. Probably used by Indians in California.

4. *Nicotiana multivalvis*. Used by Indians in the region of the Columbia River. A cultivated and quite unusual species, as is shown by the capsule being many-celled instead of two-celled.

5. *Nicotiana quadrivalvis*. A relative of the Pacific coast *Bigelovii* and *multivalvis*, but occurring east of the Rockies along the valley of the upper Missouri. Also an unusual species with a several-celled capsule. Doubtless of Pacific origin and carried eastward along old routes of Indian trade.

6. *Nicotiana attenuata*. The species used by the Indians of the Great Plains from Saskatchewan to Texas.

7. *Nicotiana Clevelandii*. A species of southern California, probably used by the Indians.

8. *Nicotiana trigonophylla*. A species occurring from western Texas to southern California, and used probably at least by the Apache Indians.

Beside discussing the relationship and distribution of these species, the speaker gave many historical details, touching upon Indian customs. He was emphatic in stating that, both from cultural as from purely botanical premises, the genus *Nicotiana*, excepting two unique endemic species of Australia, is wholly of American origin. The wide extent of its use, the number of species domesticated, and the occurrence of some which appear

to be products of cultivation, all point to the antiquity of its culture by the Amerinds.

FRANCIS W. PENNELL,
Secretary

NEWS ITEMS

Dr. Frank Shipley Collins, of North Eastham, Mass., for many years a resident of Malden, died suddenly on May 25, at New Haven, Connecticut, in the seventy-third year of his age. Mr. Collins was one of the best-known writers on the American algae, having begun his special studies of this group of plants in early manhood, as a diversion from the cares of business, and continuing them as an avocation with remarkable zeal and success. Perhaps the first of his contributions to the literature of the algae was a note published in the *Bulletin of the Torrey Botanical Club* in 1880. His two most important works were "The Green Algae of North America," published in 1909, with supplements in 1912 and 1918, and, with Dr. A. B. Hervey, "The Algae of Bermuda," published in 1917. At the time of his death he had nearly ready for publication a paper on the algae of the Philippine Islands and had projected also a manual of the marine algae of the northeastern coast of the United States. In association with Professor William A. Setchell and with the late Isaac Holden he issued the "Phycotheca Boreali-Americana," a collection of dried specimens of the algae of North America, which had reached a total of 2,400 numbers, a total only slightly exceeded by Rabenhorst's *Die Algen Europa's*, the only other series of algae exsiccatae that ever approached the Phycotheca in magnitude. The passing of Farlow and of Collins leaves a wide gap in the never too crowded ranks of the American students of the algae. [M. A. H.]

Professor Raymond J. Pool was engaged for the growing season upon a piece of industrial research in Salt Lake City in connection with certain litigation which is of long standing and in which a number of smelting companies, as well as all of the inhabitants, are interested. A commission composed of chemists, chemical engineers and botanists were at work under the direction of a Commissioner appointed by the Federal Court.